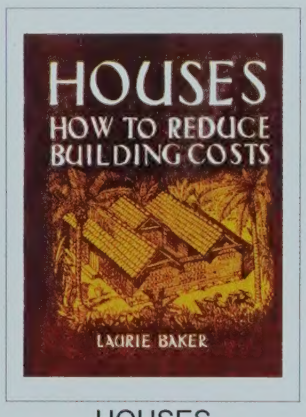
RUBBISH

BY

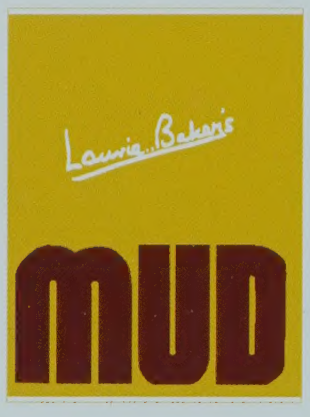
BAKER

COSTFORD

Other Titles in the Series



HOUSES
HOW TO REDUCE
BUILDING COSTS



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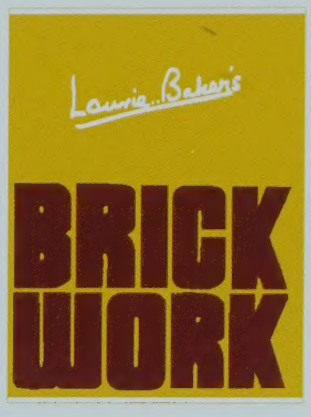

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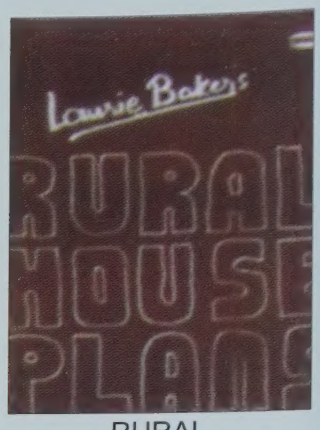

RURAL
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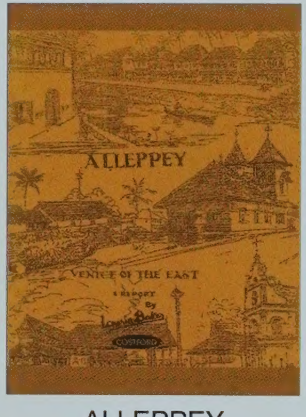

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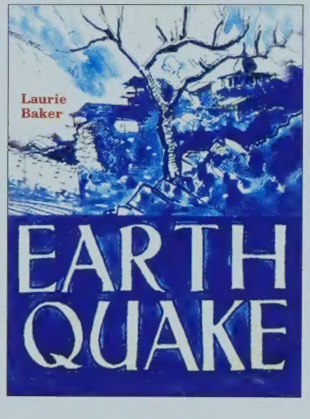

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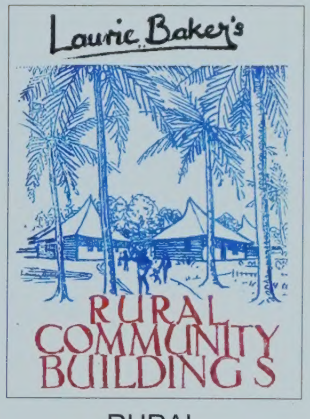

RURAL
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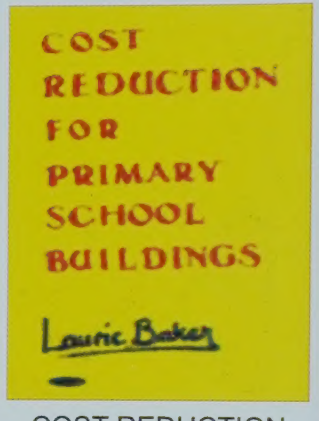
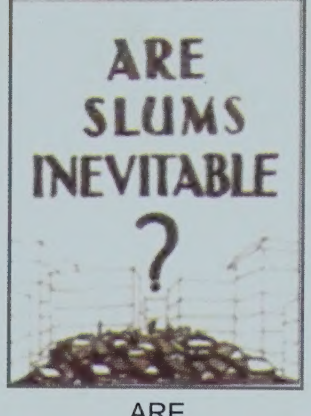


COST REDUCTION
FOR PRIMARY
SCHOOL BUILDINGS

HOUSES
HOW TO REDUCE
BUILDING COSTS



ARE
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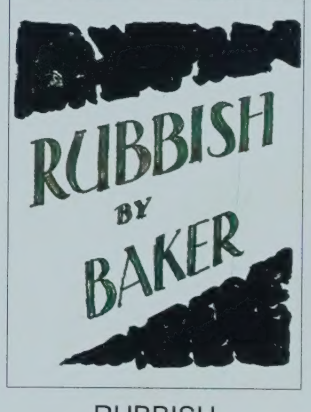
INEVITABLE



RUBBISH
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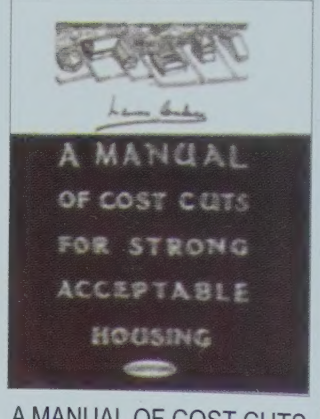

A MANUAL OF COST CUTS
FOR STRONG
ACCEPTABLE HOUSING

COSTFORD

Centre of Science and Technology For Rural Development
Ayyanthole, Thrissur, Kerala, India, PIN-680 003
Phone: 91-487-2365 988, 2366 388.
Fax: 91-487-2366 388

For Pallavi
My precious facilitator
and friend in APU
May 2018

RUBBISH
BY
BAKER

Published by
COSTFORD
Centre of Science and Technology
For Rural Development

COSTFORD

English

RUBBISH
by
BAKER

Laurie Baker

First Edition
Published in 1999

Reprint - May 2014

Published by
Centre of Science and Technology For Rural Development

Ayyanthole, Thrissur, Kerala, India-680 003
Phone: 91-487-2365 988, 2366 388.
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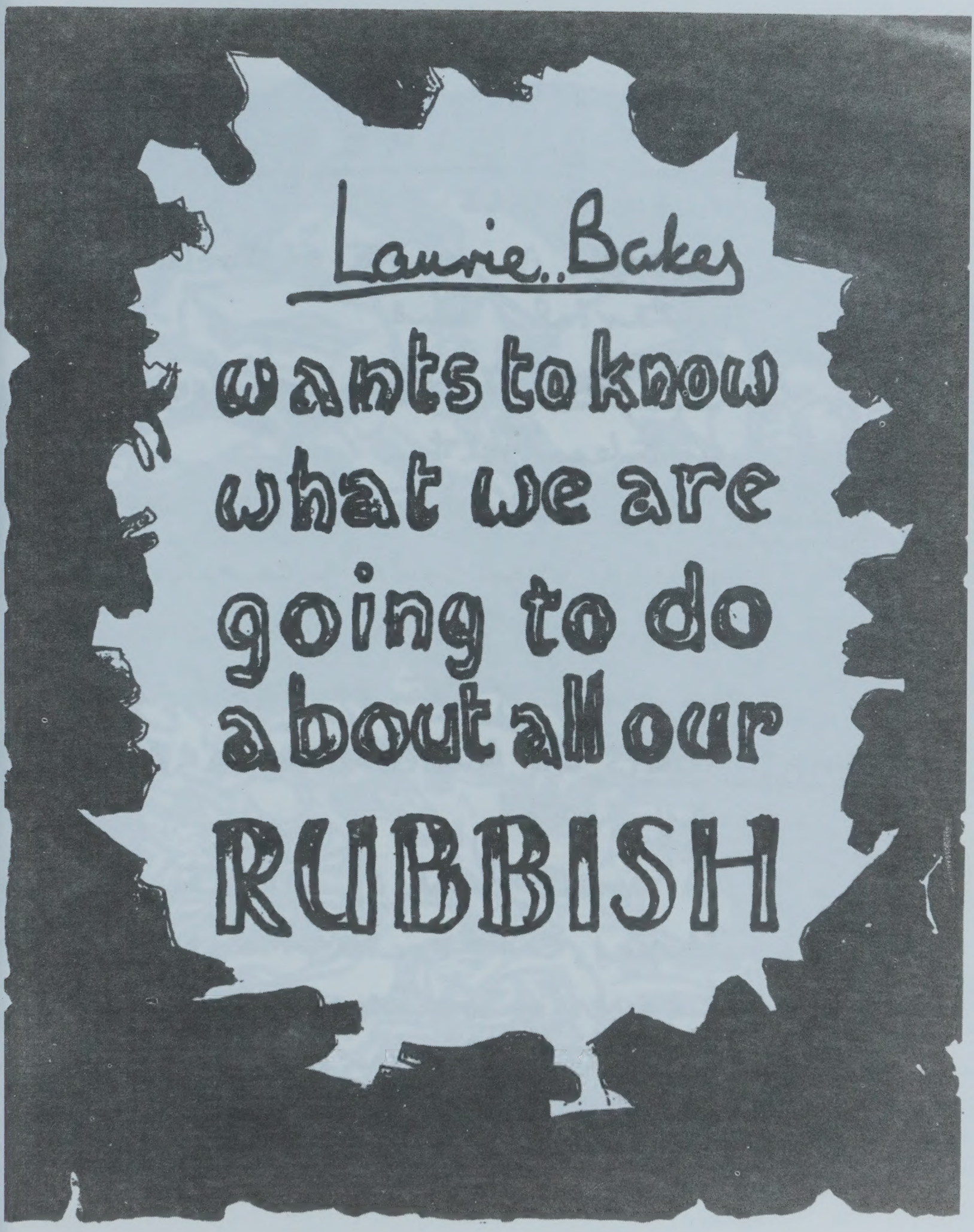
Cover & Illustrations
Laurie Baker

Price: ₹. 60/-

Printed at: MUDRA Sivakasi, Ph: 9447410514


Laurie..Bakes
wants to know
what we are
going to do
about all our
RUBBISH

RUBBISH & GARBAGE

DICTIONARIES SAY

Rubbish is waste or worthless material and

Garbage is foul refuse or worthless filth.

WHERE DO WE ENCOUNTER THESE?

Along roadsides & canal-sides.

In front of shops stalls & markets.

In front of other people's houses.

WHAT SORTS OF RUBBISH & GARBAGE?

All sorts!

A great deal of plastic;

Paper, Cardboard & Rags;

Leaves & weeds;

Old tins, broken bottles etc &

the occasional dead animal.

WHERE HAS IT COME FROM?

Houses, Shops, Stalls, Passers-by & probably you & me!

WHAT HAPPENS TO IT.

Some rots away with the help of Sun & rain, dogs, cats, rats, goats etc.

Sometimes someone sets fire to it.

All these 'agents' tend to spread it around rather than remove it.

WHAT ARE OUR OPINIONS ABOUT IT?

Disgusting! Shameful!

"They" should DO something about it".....

Once a year, one in a million writes to the 'Editor' about it.

IF IT GOES—WHERE DOES IT GO?

Usually it GROWS, not GOES.
Occasionally (Gandhi Jayanti, Green City Clean City, etc) an attempt is made To take it away.
Usually what is taken away is taken to another (less (for a time!) conspicuous place.
A large portion gets blown or shaken off while being transported.

WHAT ABOUT OUR OWN RUBBISH?

Well !.. er – it accumulates at an alarming rate. We burn what will burn. We put in a pit or bury what wont burn.
We throw a few harmless eggshells & banana skins over the wall...

We occasionally make feeble attempts at composting but soon learn that plastic won't compost.

We have a trash can or dust bin but it fills up very quickly & then we don't know what to do with it or where to empty it.

Crows & Cats come & help to scatter it—

WHY DO ANYTHING?

Because it Stinks.

It looks nasty (& it IS nasty)

It is a breeding place for flies, mosquitoes, ants, etc & is probably a source of disease.

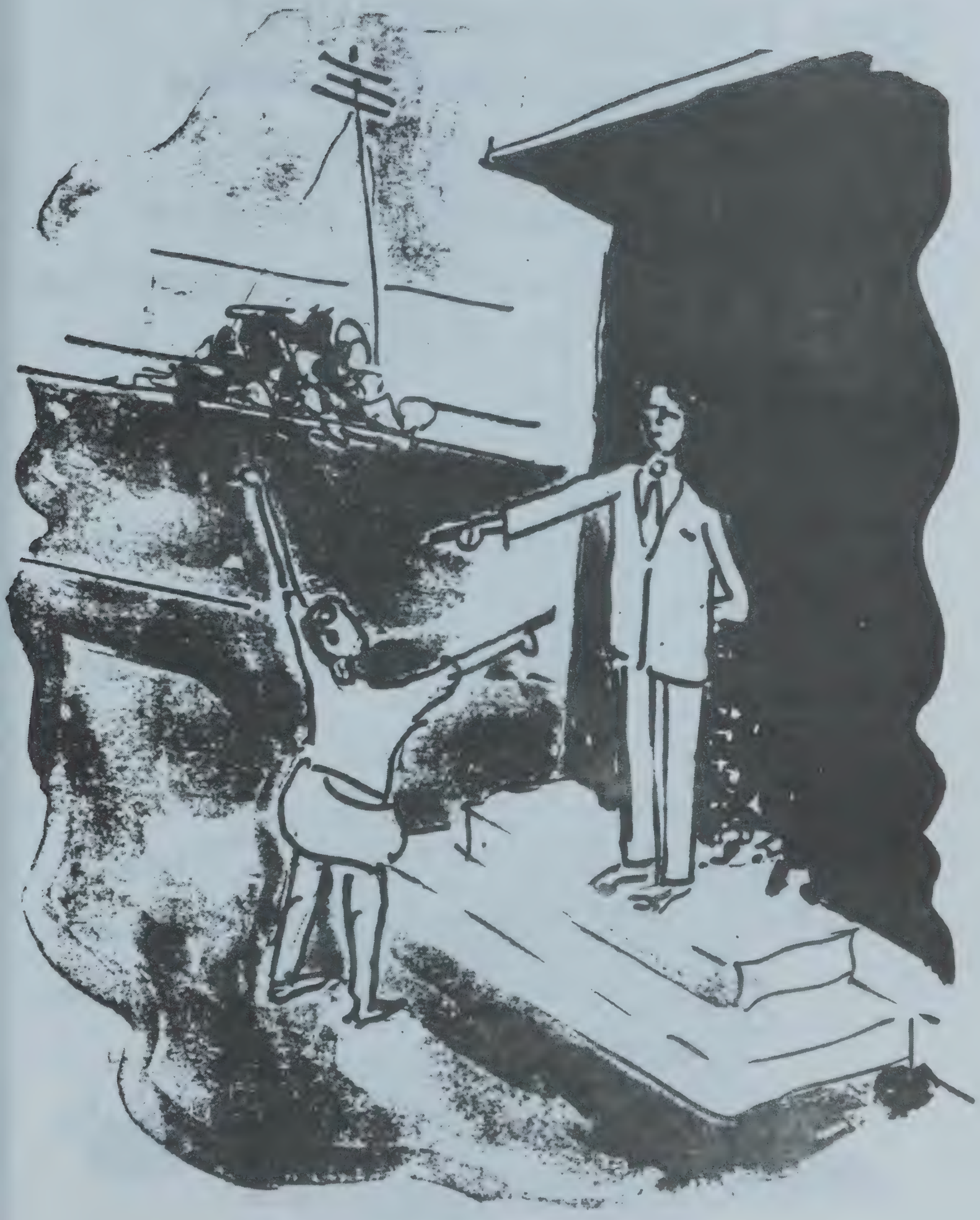
Our children get mixed up in it.

But WHY DONT, OR CANT, WE DO ANYTHING ABOUT IT ?

Where can we take it to ?
How do we take it, even if we can find a hidden dump ?
In any case, WHY dont "The Authorities" DO something about it ?

WHAT AUTHORITIES ?

Well !-er ! Surely there must be Someone who runs the town ! the Mayor ? or the Collector ? or Some one !

WHY SHOULD THE AUTHORITIES do this dirty work ?
Whose IS this (our) rubbish ?
Did the Mayor buy our milk in a plastic bag ? Did the Collector eat our bananas & throw the skins on the floor ?

CAN THEY DO ANYTHING?

"they" may have two or three trucks & a few 'sweepers'. They DO remove as much as they can carry, & take it Some where. But it all costs money! So....

PUBLIC WASTE.

There is often also a lot of 'Nobody's rubbish' - along the road sides. "I didnt put it there, so why should I do anything about it?

THERE IS AN UNMENTIONABLE BIG SNAG ABOUT REMOVING PUBLIC WASTE. The backside of rubbish piles seems to be used, between 7.p.m & 7.a.m as a 'public Convenience' (actually, a private convenience).

INDUSTRIAL WASTE

This usually only occurs, & is seen, close to factories etc - & usually what we see is a 'spill over'. Obviously factories etc should deal with their own waste - but the burning question is still there. WHERE should they put their waste ?

You can see the usual answer. Even if, in a fit of madness, you WANT to do something about it, the Security Guards don't allow you to go thro' the huge iron gates!

Mentioning the problems of factory wastes reminds me that we should remember NOT to use RIVERS as Waste Paper Buckets.
We all know about Grasim – but there are dozens of such places where chemical (& worse) wastes are cheerfully pumped into the rivers, without, apparently, any thought about many terrible consequences.
I am reminded, too, of one of the new 'facilities' at a New Tourist Information Offices in a famous Tourist Town. 'Facilities', besides information, are available & when the tourist uses this particular 'facility' a 'pull to chain' his contributions shoot straight out into the river where his fellow Tourists are boarding Sight Seeing Boats. Some sights!

So, WHAT CAN WE DO about all these problems?

I believe it must be firmly & clearly stated that all this is NOT merely a problem for the 'Authorities' to solve & act.

There are some things 'they' will need to do, but that does NOT mean that we can sit back & wipe our hands and wait.

Obviously EVERYONE, official & otherwise, must take up some of the responsibilities to deal with this growing problem and ALL MUST WORK TOGETHER if anything lasting & permanent is to be achieved.

TOWN COUN

WHAT STEPS MUST WE NOW TAKE?

1. Study carefully the situation
   the problems
   the remedies.
2. Get every one to make sensible, helpful, suggestions.
3. Experiment, when & where possible &/or necessary.
4. See what we, ourselves & our families, can do to lessen the amount of waste.
5. See what shops, producers of Goods (milk, cement, sweets etc) can do to lessen the waste they cause.
6. Study, & try a remedy, the problems caused by Packaging of almost everything we now buy!
7. Encourage the Govt. in acquiring land for dealing with waste.

HERE ARE SOME SUGGESTIONS

PLASTIC is a tiresome unmanagable waste form of rubbish.
You can burn it, but it pollutes the atmosphere, badly.
It can be recycled, but only with the use of short supply 'energy'

PLASTIC IS a useful, versatile, material but it is a product of materials which India is short of (& India has to import these materials)
A lot of 'energy' (Fuel) has to be used in its manufacture & India is very short of Energy.

CARRY your own BAG (of cloth or paper) & then there is no need for a kilo of potatoes or tomatoes etc to be given to us in a plastic bag.

MILK.

— SO LET US DISCOURAGE THE UNNECESSARY USE OF PLASTIC —
Let it be WE OURSELVES who set the example and let us courteously encourage shop owners & salesmen to use less plastic for packaging.

A REMEDY ?

Where packaging is necessary — use paper or cloth. Both of these come from renewable, re-plantable materials & PAPER can easily be recycled without the use of energy (fuel).

This remedy would reduce considerably our quantity of rubbish AND give employment.

CLOTH
BAGS
Rs 1/-
ONLY
R2/-

COMPOST ORGANIC WASTE.

Almost everything that can rot or decompose can be kept apart. (vegetable waste, tea leaves, fruit skins etc). If you have 1 square metre you can turn this waste into compost — good fertiliser which can be put in the ground or in pots — & in it you can grow your own vegetables, flowers, etc.

This not only deals with what is usually the largest amount of household rubbish, but it can reduce your expenditure on foodstuffs AND give you pleasure in not creating rubbish by growing plants & eating vegetables You have grown.

ALL PAPER should be kept (as smoothe & uncrumpled as possible) & you can sell it to 'waste paper shops' (& often you can arrange with these dealers to come regularly to collect it!)

Similarly

TINS
BOTTLES (even broken glass)
PLASTIC BOTTLES
ALL FORMS OF METAL (tooth paste tubes, all metal foil wrapping & containers, old metal utensils) Can all be sold to dealers, who in turn pass on these materials for recycling by experts.

This will considerably reduce your household rubbish.

INCINERATERS are often suggested for burning rubbish BUT

INCINERATERS CAUSE

1. Air pollution
2. They often get overfilled & clogged so that they won't burn!
3. People often stuff unburnable materials in, & again it gets clogged up & won't burn
4. There is a limited quantity of rubbish that it will hold.
5. People also throw in wet items...
6. Most of what will burn could more profitably & suitably be recycled & used again.

However there ARE limited uses for them. (incinerators)

FAMILY SORTING OF RUBBISH.

"All this talk of recycling and composting - maybe OK - but I am a busy person & have no time to waste ...."

NEIGHBOURHOOD GROUPS

Can arrange for family sorting of rubbish. Each family or shop can have, say, four big bags (preferably of the sort of paper used for cement packaging) - (only plastic bags if other material is not possible!!)

The bags can be of 4 different colours. One for organic waste, one for metals, one for glass, & one for plastics. etc

These can then be collected, at agreed times, for disposal to appropriate dealers or recyclers. (Collection, of course is another big problem - see later!).

METAL
ORGAN

One further important point concerning our involvement in 'DEALING with RUBBISH':-

WE OURSELVES must set the example of not only dealing with Rubbish That accumulates in our homes but we must TEACH OUR CHILDREN also to be careful —

A Not to create unnecessary rubbish —

B To keep various types of rubbish separate in properly provided Containers —

C Not to Throw 'Small rubbish' anywhere - but put it in its proper Container —

D Ask our School Teachers also, to help To make our children RUBBISH CONSCIOUS and RUBBISH CAREFUL.

Another Category of WASTE PRODUCERS who need our Sympathy + help are SHOP & STALL Keepers.

~~reasons~~ best known to themselves, some of our 'Authorities' allow shops (even new ones) to be occupied & used without the provision of a toilet or waste disposal facilities! (Many do not even have water!)

Perhaps one way of helping in this context is to help design & provide suitable, portable, light weight, sightly, separate containers (could be of fibre glass?) which could be collected (out of hours!) from shops.

Similarly a lot needs to be done, & provided, for the salespeople in Market Places
and for the areas where STALLS proliferate along the pavements of busy town streets.
PERMANENT STRUCTURES, holding removable (fibre glass?) containers which must be regularly & frequently taken away (& replacements installed) need to be provided — this time by the AUTHORITIES! they also need to provid for the removal of this rubbish. garbage, regularly.

Perhaps it may be necessary to impose a fine on stall holders if they do not make proper use of these facilities.
(Cant we fine the Authorities for non-cooperation?

As usual there are 3 main problems about all of these proposals & suggestions

1. WHO makes DECISIONS, MAKES, & PAYs for these schemes?

2 WHO Empties, removes & replaces clean containers?

3. WHERE do 'They' take the 'rubbage' to ?

(Not to mention the question of HOW do they take away nasty smelly garbage to the dump or recycling depot?)

PERMANENT CONTAINERS

need to conform to several requirements :-

They MUST be

1. STRONG. & not easily defaced or destroyed.
2. PROMINENT, so that we do not have to hunt for them
3. SIGHTLY & BEAUTIFUL so that we do not replace an unsightly dump with an ugly, overflowing container!
4. the EXTRACTION of separate Containers (portable) must not be difficult. (But probably lockable?)
5. have separate CONTAINERS for the different types of rubbish- ~~fitter~~ 'Four in One', or separate ones, where needed, (ie for cabbage leaves & fish heads where the decapitation takes place.)

FRONT
BACK

TRANSPORT for removal of rubbish.
Vehicles are necessary for carrying waste from Source to 'Dump'

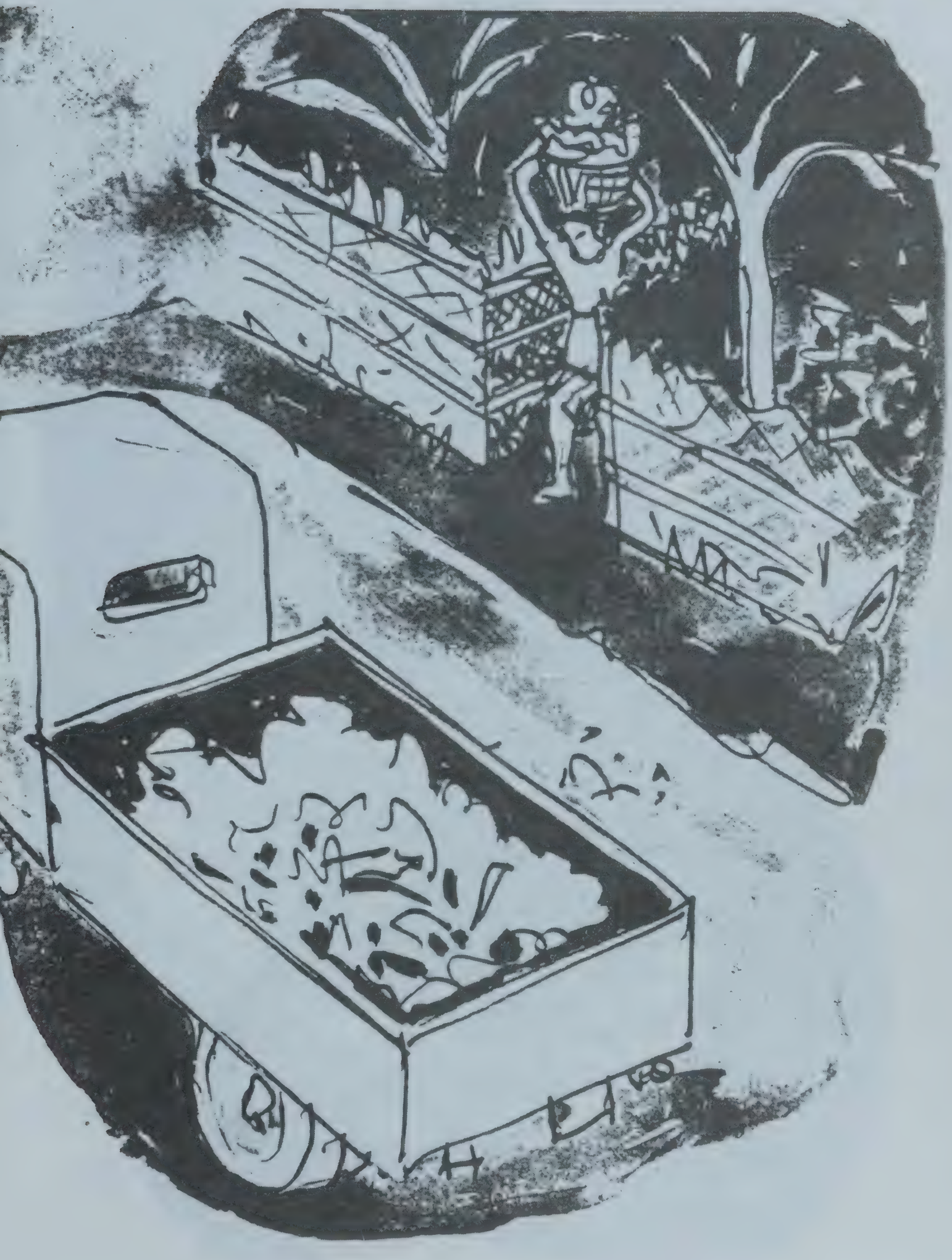
The VEHICLE will depend on the location of the rubbish & its distance to 'the Dump'.

Much rubbish comes from places not on roadsides but reached only by paths or very narrow lanes.

LORRIES & TRUCKS will only reach some Sources of rubbish. Hand-loading to a road is undesirable (!)

AUTOS, adapted, can reach a larger number of houses etc.

CYCLES (& tricycles) can reach almost everywhere.



CYCLES V. TRUCKS

Carrying Rubbish by <u>cycle</u> has many advantages over a Truck.

1. You can buy 200 cycles for the cost of 1 Truck.
2. No Fuel.
3. No Air pollution.
4. No Noise pollution.
5. Can go almost anywhere.
6. Less, and easier, maintenance & repair costs.
7. Creates <u>unskilled employment</u>.
8. No need to 'lift high' when loading containers.

6Tc.

AC

MULTI VEHICLE TYPE

Depending upon the distance to carry rubbish containers to 'Dumps' - it may be desirable for CYCLE CARRIERS to take containers to local roadside depots & then TRUCKS can take the containers the longer road distance to 'Dumps' or Recycling Factories.

These latter are likely to be well away from the Town (we hope)

However - this intermediate transfer operation calls for more labour.

Aerial Rope-ways could be considered for this longer distance (& could go straight over paddy fields etc.).

THE MAIN 'DUMP'.

Obviously, any scheme will not work until a suitable place (or places) are available for taking all the rubbish & garbage of a town to.

This almost certainly is a (local) Government job.

This 'DUMP' should not be envisaged as a permanently growing disgusting mountain... there must be places for :-

A COMPOSTING & fertiliser manufacture.

B Recycling plants for PAPER, METALS, GLASS, PLASTICS &

C a 'CREMATORIUM' for dead carcases!

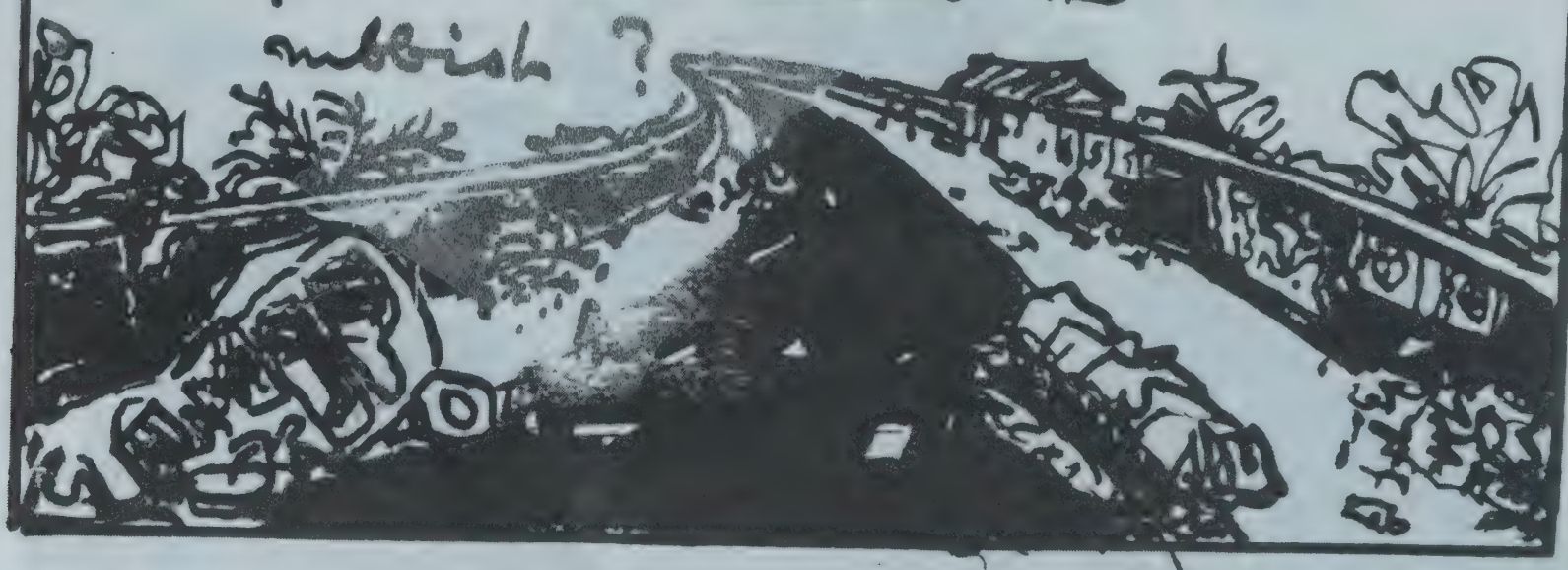
All this Rubbish Talk is not just being fussy. Our D.T.Ps. should tell us that WE are the VICTIMS of our own rubbish! we suffer nasty smells, ill health, diseases, & even untimely expiry if we just let this curse of modern life, together with our filthy habits, go on increasing like politics & population.
We make such a 'to-do' about washing & bathing but don't even bother to raise a deprecating eye brow at our G.R.Ps *
Let's start saying GoodBye to Rubbish before the end of this millennium.

(G.R.P = Growing Rubbish Piles)

YES! CANT YOU SEE? THAT'S WHAT I'M DOING
DOWN WITH RUBBISH

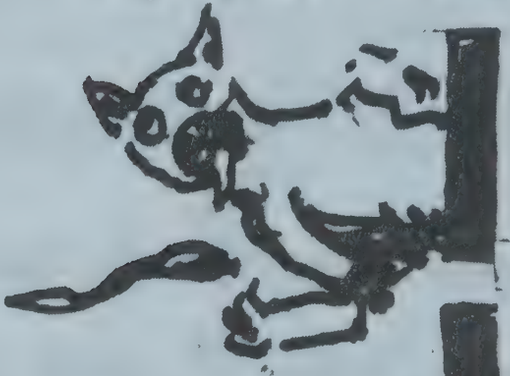
We are welcoming the new Millennium in many ways. Highways will be lined with flags & lights — AND, more probably than not, piles and piles of rubbish!
After a few days of celebration the flags and lights will be taken away.....

.....what is your prediction about the rubbish?



ROTTEN

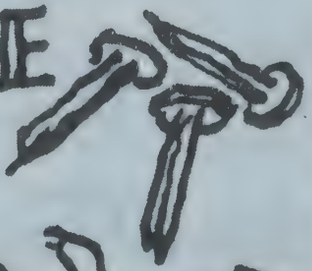
UGLY



BROKEN

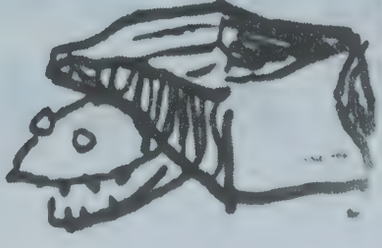
BEASTLY

INEXCUSABLE



SHAMEFUL

HORRID



Concerning this Subject of RUBBISH, I have my doubts about the development of enthusiasm coming from any of our Government departments. On the other hand there are a few very successfully active N.G.Os — several of them specialising in training the Unemployed, & particularly unemployed Women, in various occupations which not only provide them with work which can be paid for — but the sort of work that helps the Country to get rid of some nasty shameful practices.

We must shed this old SWEEPER mentality but we, ourselves, sorting out & collecting in suitable receptacles all the rubbish we create, & then, in modern workshops, they can be recycled or be properly and hygienicly disposed of.

This booklet is suitably entitled 'Baker's Rubbish' & I do earnestly hope that it will help change our whole attitude & approach to RUBBISH — both creating it AND properly disposing of it, & that both Government & Non Government organisations will take up the challenge for the New Rubbishless Millennium.

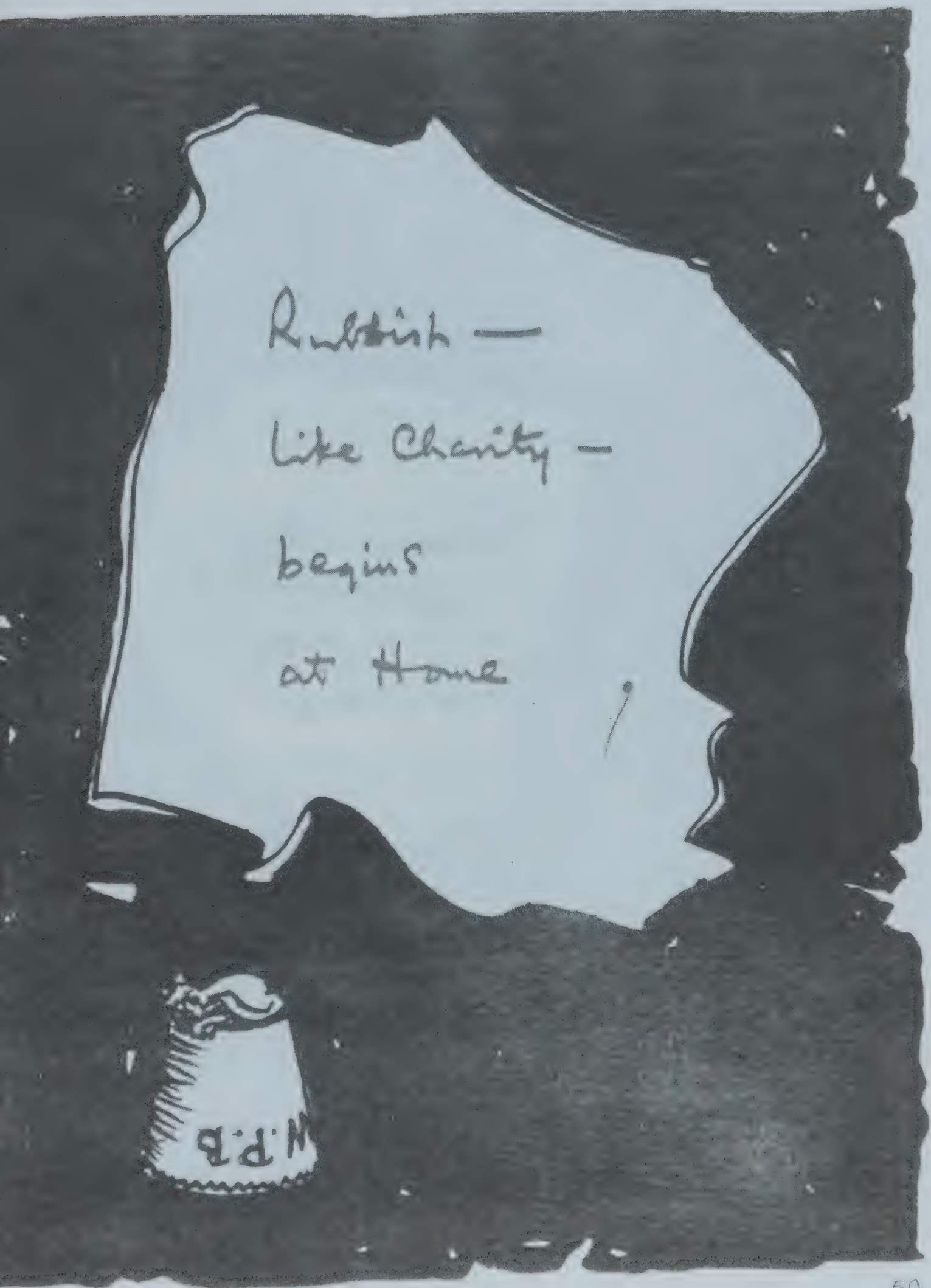
Love, Baker

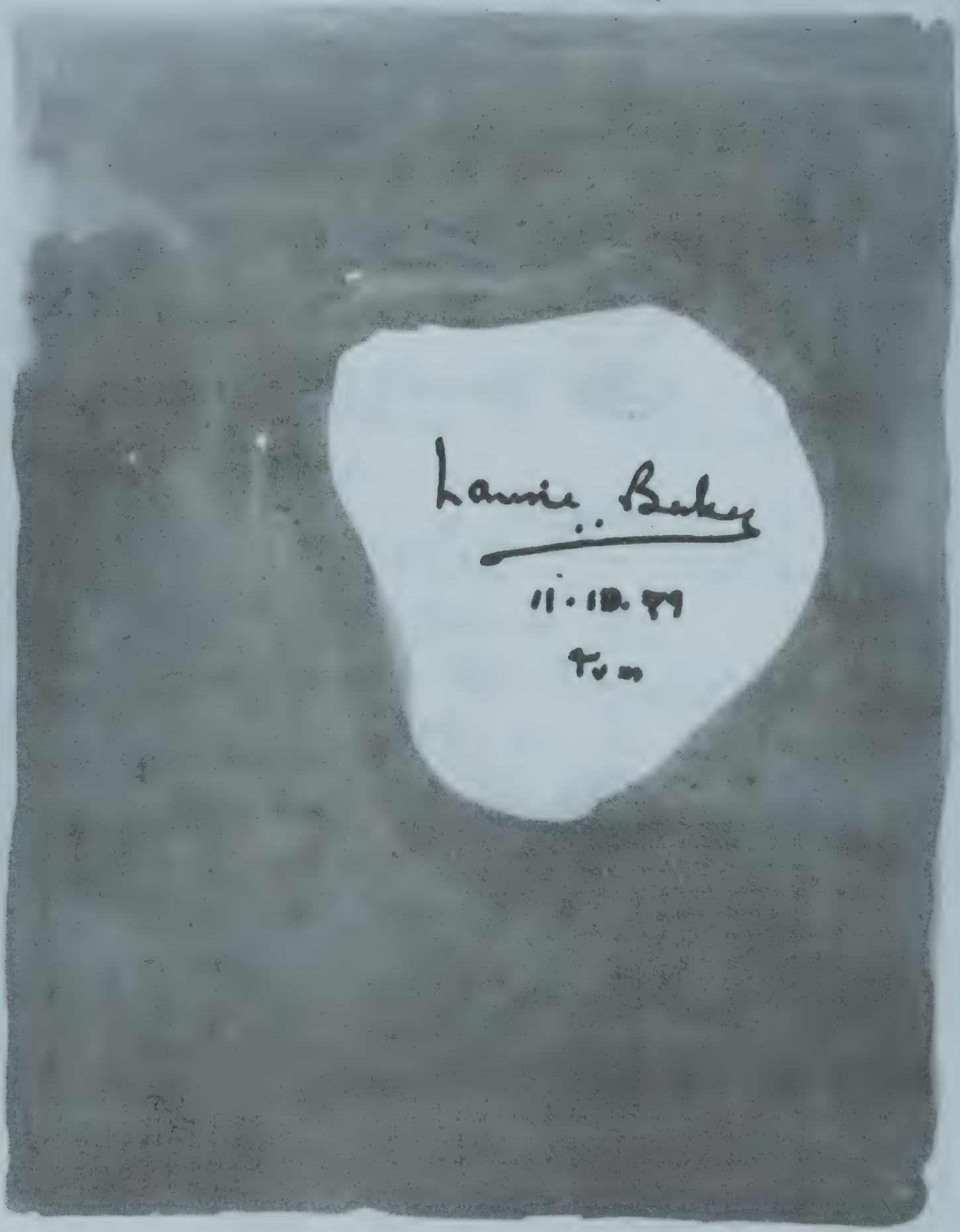
FINALY I think it is obvious that this must be a

WHOLE COMMUNITY PROJECT.

It must cater to the whole area & its people.
It will benefit the whole area & all its people.
It must have the support & the Co-operation of ALL the PEOPLE of the area of the project.
It must be the CONCERN, & the will to make it SUCCEED of everybody.

Only then will it be a Success.


Rubbish —
like Charity —
begins
at Home
N.P.B.


Laurie Baker
11.10.99
Trivandrum

COSTFORD

The Centre of Science and Technology for Rural Development known by its acronym COSTFORD was established in 1985 to develop, demonstrate and disseminate alternative technologies that will ultimately change the social, economic and political positions of the poor, deprived and marginalized sections of society. The initial thrust area of the activities of COSTFORD was the diffusion of cost and energy effective alternatives to building technology. In consideration of the commendable work done by COSTFORD, the Government of Kerala has recognized it as an accredited agency to execute construction works using alternative technologies for all Government Departments and Agencies. Hundreds of architects and engineers trained by COSTFORD in Baker philosophy have become the change agents in the construction sector. It also gives special emphasis to the needs of women in society through training, organization and employment generation schemes.

COSTFORD extends consultancy services to Panchayati Raj Institutes for local economic development, decentralized planning and governance.

Besides, COSTFORD has also been interacting with students from various disciplines and has created a library and research centre on subjects that are relevant from the point of people-centred development. Annual memorial lectures by eminent public personalities and intellectuals are organised to commemorate the contributions of C. Achutha Menon, K.N. Raj and Laurie Baker. Special lectures and classes are also conducted on themes of topical interest.

COSTFORD has constructed a large number of buildings including houses for government and non-government institutions and families. In its quest to carry on the legacy of Laurie Baker, it has also been experimenting with alternative cost effective but environmentally-friendly materials such as bamboo, mud and wood. It has won several prizes and awards for its construction activities. More details can be accessed from its website: www.costford.org

COSTFORD has published 12 books authored by Laurie Baker and 30 books authored by others. A Malayalam quarterly "Puthuvazhi" is being published under its initiative to promote and popularize alternative perspectives on development, environment, gender, social oppression and culture.

LBC for Habitat Studies

The Laurie Baker Centre for Habitat Studies was established in 2009 to carry on the legacy of Laurie Baker. Located 12 kms from Trivandrum city in a lush campus of around 4 acres in the Vilappilsala Panchayat, it conducts training, research and publication activities. More details can be accessed from its website: www.lauriebakercentre.org

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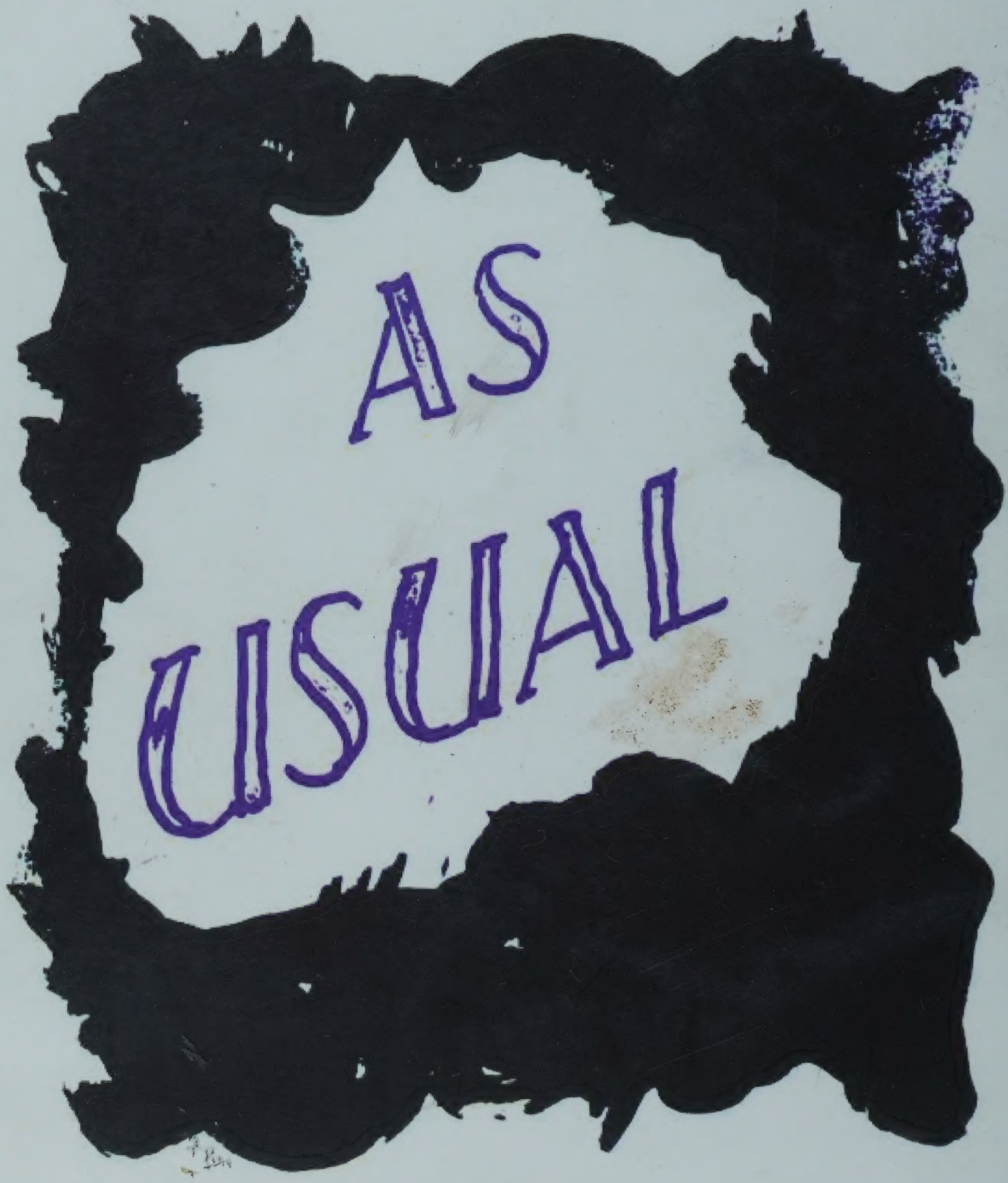
THE AUTHOR

Laurence Wilfred Baker was not just a well-known architect. He was also a cartoonist, a man who loved nature and above all, a humanist. He was a Gandhian in his thoughts and deeds. Born in 1917 he became an Associate of the Royal Institute of Architects in the United Kingdom after studying at the Birmingham School of Architecture. A chance meeting with Mahatma Gandhi inspired and introduced him into India in 1944. Following this he lived and worked in India helping his Kerala-born wife and medical doctor Elizabeth Baker and also practicing his architecture in meeting the housing and living requirements of the rural poor. It was in a remote village, Pithoragarh, in the Himalayan region where they built their home, hospital and school. In the mid-sixties the Bakers moved to Kerala and made it their home.

After moving to the city of Trivandrum in 1970, Baker built several buildings including numerous houses and institutions that were cost effective as well as environment-friendly. The late C. Achutha Menon, the visionary Chief Minister of Kerala during 1969-77 was an admirer and ardent supporter of Baker's philosophy and approach to building construction. So was the late K.N. Raj, one of India's outstanding economists. Baker was closely associated with several governmental and other public institutions to advise on matters relating to cost effective building technology. He also mentored a large number of young architects who came to work and live in Trivandrum. He authored several books imparting knowledge on housing and building construction. He also drew cartoons and was also a painter. He and his wife led a life of simplicity and service. Laurie Baker passed away on 1st April 2007.

There are two organizations that carry on his legacy. One is the Centre of Science and Technology for Rural Development known as COSTFORD headquartered in Thrissur with units in Trivandrum and other districts in Kerala. This was jointly founded by C. Achutha Menon, K.N. Raj and Laurie Baker himself in 1985. The other is the Laurie Baker Centre for Habitat Studies located in Trivandrum and founded in 2009 under the initiative of COSTFORD activists with financial support from the Government of Kerala to undertake training, research, publication and other activities relating to the building of a green habitat following the philosophy and approach of Laurie Baker.

Laurie Baker Series: Book - 11



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